

DOCKET NO. 119959
Response to Notice of Non-Compliant Amendment

Amendments to the Claims

This listing will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended): A system for transferring spent nuclear fuel ~~to a cask~~ comprising:

a cask having a horizontal cross-section for receiving the spent nuclear fuel;

a below grade opening adapted for receiving a the cask;

a cask support means positioned within the opening, the cask support means capable of vertical movement; ~~and~~

means for vertically moving the cask support means;

wherein the cask support means is capable of lowering the cask within the opening; and

a shell forming walls of the opening, the shell having a horizontal cross section that is slightly larger than the horizontal cross section of the cask.

Claim 2 (Cancelled).

Claim 3 (Cancelled).

Claim 4 (Currently Amended) The system of claim 1 ~~3~~ wherein the shell and the cask are cylindrical.

Claim 5 (Original) The system of claim 1 wherein the means for vertically moving the cask support means is at least two lifting jacks.

Claim 6 (Original) The system of claim 5 wherein the plurality of lifting jacks are coupled so as to keep the cask support means approximately level during vertical movement.

Claim 7 (Original) The system of claim 5 wherein the number of lifting jacks is three.

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Claim 8 (Original) The system of claim 5 wherein the jacks are located outside the opening and are accessible from grade level.

Claim 9 (Original) The system of claim 1 wherein the cask support means has a fully lowered position and a fully raised position.

Claim 10 (Original) The system of claim 9 wherein when the cask support means is in the fully raised position the cask support means is below grade.

Claim 11 (Original) The system of claim 9 wherein when the cask support means is in the fully lowered position and supporting a cask having a height, at least a major portion of the cask's height is below grade level.

Claim 12 (Currently Amended): A The system of claim 11 for transferring spent nuclear fuel comprising:

a below grade opening adapted for receiving a cask;

a cask support means positioned within the opening, the cask support means capable of vertical movement between a fully lowered position and fully raised position;

means for vertically moving the cask support means;

the cask support means capable of lowering the cask within the opening

wherein when the cask support means is in the fully lowered position and supporting the cask, wherein approximately 30 inches of the cask is above grade level.

Claim 13 (Original) The system of claim 1 wherein the opening has a bottom, the system further comprising a setdown structure positioned at the bottom of the opening and below the cask support means.

Claim 14 (Currently Amended): A The system of claim 13 for transferring spent nuclear fuel comprising:

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a below grade opening having a bottom and adapted for receiving a cask;

a cask support means positioned within the opening, the cask support means capable of vertical movement;

means for vertically moving the cask support means;

the cask support means capable of lowering the cask within the opening;

a setdown structure positioned at the bottom of the opening and below the cask support means; and

wherein when the cask support means is in a fully lowered position, the cask support means contacts the setdown structure and the cask support means and any load being borne by the cask support means is supported by the setdown structure.

Claim 15 (Original) The system of claim 1 wherein the cask support means is a platform having a center and a top surface.

Claim 16 (Currently Amended): A The system of claim 15 for transferring spent nuclear fuel comprising:

a below grade opening adapted for receiving a cask;

a platform for supporting the cask, the platform positioned within the opening and capable of vertical movement;

means for vertically moving the platform;

the platform capable of lowering the cask within the opening;

the platform having a center, a top surface wherein the cask support means has a hole near the center, and a plurality of cask positioning plates on the top surface.

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Claim 17 (Original) The system of claim 1 further including vertical guide rods on which the cask support means can move.

Claim 18 (Currently Amended) A The system of claim 17 for transferring spent nuclear fuel comprising:

a below grade opening adapted for receiving a cask;

a cask support means positioned within the opening, the cask support means capable of vertical movement; and

means for vertically moving the cask support means;

wherein the cask support means is capable of lowering the cask within the opening.

vertical guide rods on which the cask support means can move; and

wherein the vertical guide rods have a top and a bottom, the vertical guide rods being secured at the top so that upon loading the cask support means the vertical guide rods are in tension.

Claim 19 (Withdrawn): A method of transferring a canister of spent nuclear fuel to a cask comprising the steps of:

lowering a receiving cask having a height into a below grade opening so that a portion of the receiving cask's height is below grade level; and

transferring the canister to the receiving cask.

Claim 20 (Withdrawn): The method of claim 19 further comprising the steps of:

placing the receiving cask on a cask support means located within the opening, the cask support means capable of vertical movement;

lowering the receiving cask into the opening by lowering the cask support means;

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aligning the canister above the receiving cask; and

lowering the canister into the receiving cask.

Claim 21 (Withdrawn): The method of claim 20 wherein at least two jacks are used to lower the cask support means.

Claim 22 (Withdrawn): The method of claim 21 wherein the at least two lifting jacks are coupled so as to keep the cask support means approximately level during vertical movement.

Claim 23 (Withdrawn): The method of claim 21 wherein the number of lifting jacks is three.

Claim 24 (Withdrawn): The method of claim 21 wherein the jacks are outside the opening and are accessible from grade level.

Claim 25 (Withdrawn): The method of claim 20 wherein a shell is used to form walls of the opening.

Claim 26 (Withdrawn): The method of claim 25 wherein the shell and the receiving cask are cylindrical.

Claim 27 (Withdrawn): The method of claim 25 wherein the cross section of the shell is slightly larger than the cross section of the lowered receiving cask.

Claim 28 (Withdrawn): The method of claim 27 further comprising inserting one or more lateral restraints between the shell and receiving cask.

Claim 29 (Withdrawn): The method of claim 20 wherein the cask support means has a fully lowered position and a fully raised position.

Claim 30 (Withdrawn): The method of claim 29 wherein when the cask support means is in the fully raised position the cask support means is below grade level.

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Claim 31 (Withdrawn): The method of claim 29 wherein when the cask support means is in the fully lowered position, at least a major portion of the receiving cask's height is below grade level.

Claim 32 (Withdrawn): The method of claim 20 wherein about 30 inches of the receiving cask is above grade level.

Claim 33 (Withdrawn): The method of claim 20 wherein the opening has a bottom with a setdown structure positioned at the bottom of the opening and below the cask support means.

Claim 34 (Withdrawn): The method of claim 33 wherein when the cask support means is in a fully lowered position, the cask support means contacts the setdown structure and the cask support means and any load being borne by the cask support means is supported by the setdown structure.

Claim 35 (Withdrawn): The method of claim 20 wherein the cask support means is a platform having a center and a top surface.

Claim 36 (Withdrawn): The method of claim 35 wherein the cask support means has a hole near the center and a plurality of cask positioning plates positioned on the top surface.

Claim 37 (Withdrawn): The method of claim 20 wherein the cask support means moves along a plurality of vertical guide rods.

Claim 38 (Withdrawn): The method of claim 37 wherein the vertical guide rods have a top and a bottom, the vertical guide being secured at the top so that any loading from the cask support means results in the vertical guide rods being in tension.

Claim 39 (New) The system of claim 1 wherein when the cask is positioned in the opening, the horizontal cross section of the shell is substantially concentric with the horizontal cross section of the cask.

Claim 40 (New) The system of claim 1 wherein when the cask is positioned in the opening, a tight clearance is formed between the shell and the cask.

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Claim 41 (New) A system for transferring spent nuclear fuel comprising:

a below grade opening adapted for receiving a cask;

a cask support means positioned within the opening, the cask support means capable of vertical movement between a fully lowered position and fully raised position;

means for vertically moving the cask support means;

the cask support means capable of lowering the cask within the opening;

wherein when the cask support means is in the fully lowered position and supporting the cask, a portion of the cask is above grade level.